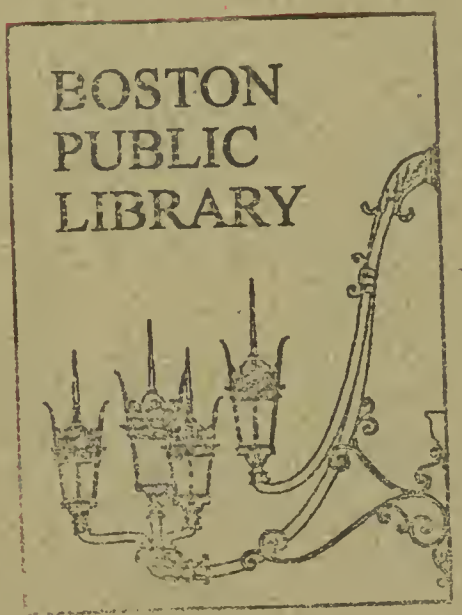
10

ST. JAMES AVENUE

BOSTON, MASSACHUSETTS

PROJECT NOTIFICATION FORM



November 1990

Submitted to:
Boston Redevelopment Authority

Submitted by:
Macomber Development Associates, L.P.

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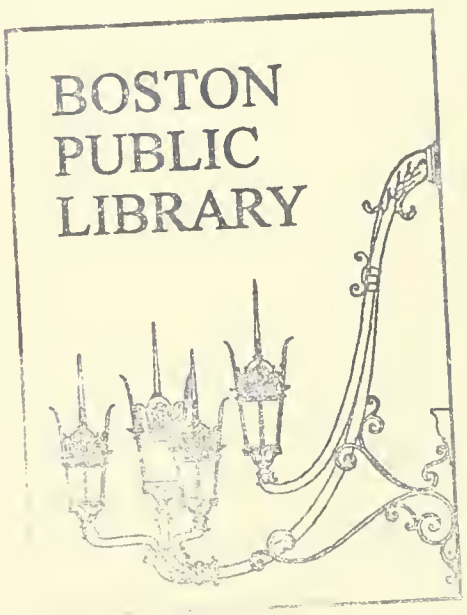

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Submitted to:
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Submitted by:
Macomber Development Associates, L.P.

Prepared by:
Skidmore, Owings & Merrill
Cambridge Systematics, Inc.
Haley & Aldrich, Inc.
Tech Environmental, Inc.

BOSTON REDEVELOPMENT AUTHORITY
PROJECT NOTIFICATION FORM
SUBMITTED PURSUANT TO ARTICLE 31 OF BOSTON ZONING CODE

I. SUMMARY

A. Project Identification

1. Project Name

10 St. James Avenue

B. Address/Location

1. Property Owner

RDC-10 St. James Avenue Realty Trust
c/o Macomber Development Associates, L.P.
One Main Street
Cambridge, Massachusetts 02142

2. Developer

Macomber Development Associates, L.P.
One Main Street
Cambridge, Massachusetts 02142

3. Developer's Representative, if applicable

Anthony Pangaro, General Partner
Archie McIntyre, Project Manager

4. Architect

Skidmore, Owings & Merrill
220 East 42nd Street
New York, NY 10017

David M. Childs, Partner

5. **Legal Counsel**

Hale and Dorr
Counsellors at Law
60 State Street
Boston, MA 02109

John D. Hamilton, Jr.
Melvin R. Shuman

6. **Consultants**

Environmental Assessment Coordination, Urban Design and Planning
Skidmore, Owings & Merrill
220 East 42nd Street
New York, NY 10017

Karen B. Alschuler
Marilyn J. Taylor

Traffic and Transportation Analysis
Cambridge Systematics, Inc.
222 Third Street
Cambridge, MA 02142

Robert Lepore

Air Quality and Noise Analysis
Tech Environmental, Inc.
Reservoir Place
1601 Trapelo Road
Waltham, MA 02154

Peter Guldberg

Infrastructure Analysis
Vollmer Associates
6 St. James Avenue 4th floor
Boston, MA 02116

Edmund Condon

Geotechnical Groundwater Analysis
Haley & Aldrich, Inc.
238 Main Street
Cambridge, MA 02138

Edward Johnson

Construction Consultation
George B. H. Macomber Co.
530 Atlantic Avenue
Boston, MA 02210

Don Colavecchio

7. **Estimated Commencement/Estimated Completion**

Construction is expected to commence in the fall of 1991, and be completed in the fall of 1993.

8. **Approximate Construction Cost**

Approximately $62,000,000 total construction.

9. **Status of Project Design**

Conceptual design

10. **Is this project subject to Boston Zoning Code, Article 31? If not, explain.**

Yes, this project is subject to Article 31.

C. **Narrative Project Description (Describe the site and the design and development programs.)**

10 St. James Avenue is a mixed-use project which includes commercial offices, ground floor retail, a through block galleria and cultural and day care facilities in the Park Square/Back Bay districts of Boston. One component of the project will be the historically sensitive restoration of the 75 Arlington Street Building, formerly known as the Paine Furniture Building, giving it a strong presence on Park Square. As a second component of the development plan, the deteriorated Greyhound Bus Terminal will be demolished for construction of a new office and retail structure joined to 75 Arlington Street by a naturally lit pedestrian galleria.

The building program consists of the construction of 527,500 square feet in the new building and galleria. Combined with the approximate 244,000 square feet that currently exists in 75 Arlington Street, the total project size will be 771,500 square feet. Of the combined total, 750,000 square feet will be devoted to commercial uses (office and retail) and 21,500 square feet will be devoted to public amenity space, including the galleria, cultural uses, and a day-care center.

The site of the new office/retail structure runs through-block from St. James Avenue to Stuart Street, and includes 75 Arlington Street to the east and abuts Liberty

Mutual Life Insurance Building to the west. Greyhound Bus, Inc. is the present tenant on the site of the proposed new building. It is anticipated Greyhound will relocate its operations as part of the completion of a multi-modal transportation terminal at South Station.

Consequently, 10 St. James Avenue will replace the congestion, disruption and visual confusion of the Greyhound Terminal with a structure which invites pedestrians, fills a gap in the traditional streetwall with active retail, cultural, and office uses and becomes an attractive new member in the family of moderate height commercial structures that characterize this area of the city. The new building will rise from a 3 story base to a height of 21 stories or 265 feet and will be linked to and enhance the 10 story, 130-foot-high 75 Arlington Street Building.

The three-story pedestrian galleria will link Stuart Street and St. James Avenue, and provide interior connections to ground-floor retail. The interior arcade will become a new link in an historic system of interior building arcades such as the Park Square Building, and Statler/Park Plaza arcades. The 10 St. James Avenue galleria will be designed with maximum transparency to allow natural light to reach the pedestrian space, to provide views to the historic Armory of the First Corps of Cadets, and to feature interior light on winter afternoons and evenings. As such this through-block connection will reinforce the character of this site as a transitional element linking the activities of Back Bay, Park Square, Bay Village and South End, and in doing so, will provide a new front door to the site for both the South End and Bay Village neighborhoods as well as Back Bay.

D. Project Benefits

The proposed project will provide the following benefits:

- creation of 453 construction jobs
- creation of 2,682 permanent jobs
- expansion of the City's tax base
- housing contribution grant of $2,067,500
- jobs contribution grant of $413,500
- historic restoration to the 75 Arlington Street Building
- provision of day care services in Back Bay
- provision of a Galleria; a new active public space open year-round

As a secondary effect of the proposed project, the following benefits will also occur:

- removal of the deteriorated Greyhound Bus Terminal structure currently on site
- preservation of views to the historic Armory of the First Corps of Cadets
- relocation of long-haul buses from the Back Bay to South Station
- rationalization and upgrading of commuter bus service throughout the Back Bay
- Pedestrian linkage of Bay Village and South End to Back Bay neighborhoods

E. Community Review Groups

Public interest and community groups identified to date that may take an interest in development on the 10 St. James Avenue site include:

Back Bay Architectural Commission
Neighborhood Association of the Back Bay
Bay Village Neighborhood Association
Boston Greenspace Alliance, Inc.
Boston Preservation Alliance
Boston Society of Architects
Boston Urban Gardeners
Ellis Neighborhood Association
Park Plaza Citizens Advisory Committee (CAC)
Back Bay Association
Boston Theatre District Association
Friends of the Public Garden
Walk Boston

F. Public Agency Permits & Approvals

The following is a list of federal, state, and city agencies from which permits or other actions may be sought:

Agency Name	Permit or Action
<u>City</u>	
Boston Transportation Department	Transportation Access Plan Approval
Boston Air Pollution Commission	Parking Freeze Permit and Exemption from Parking Freeze for Tenant Spaces
Boston Employment Commission - Mayor's Office of Jobs and Community Services	Boston Residents Construction Employment Plan Approval
Public Improvement Commission, Department of Public Works	Street Repair Plan and Curb Cut Permit
Inspectional Services Department	Lot Consolidation
	Demolition Permit
	Building Permit

Boston Committee on Licenses, Public Safety Commission	Permit to Erect and Maintain Parking Garage
	Fuel Storage License
Boston Water & Sewer Commission	Local Sewer Tie-in Approval
Boston Fire Department	Certificate of Registration Fire Safety Permits Removal Permit for Underground Storage Tanks
Board of Appeal	Building Code Variances

State

Department of Environmental Protection - Division of Water Pollution Control	Sewer Extension/Connection Permit
- Air Quality Control Division	Fossil Fuel Utilization Permit
- Site Assessment Section/ Waiver Unit	Waiver Approval under Massachusetts Contingency Plan
Massachusetts Water Resources Authority	Sewer Use Discharge Permit
Executive Office of Environmental Affairs	MEPA Review and Approval
Massachusetts Historical Commission	Determination of Effect
Executive Office of Transportation and Construction	Approval for Development on Former Railroad Property

G. **List any zoning relief required for this project (including any zoning variance, exception, conditional use permit, interim planning permit, zoning map or text change, or Development Impact Project Agreement).**

Agency Name	Zoning Relief
Boston Civic Design Commission	Review and Recommendation
Boston Redevelopment Authority	Article 31 Review and Approval Development Impact Project Approval
Boston Redevelopment Authority, Boston Zoning Commission	Planned Development Area Approval
Board of Appeal	Exceptions, Variances and/or Conditional Use Permits

H. **Governmental agencies or programs from which financial assistance for project is sought.**

None.

II. PROJECT DESCRIPTION

A. **Attach map showing location of project; survey if available; site plan and architectural rendering if available.**

Refer to the following attachments:

Figure 1: USGS Site Location Map
Figure 2: Roof Plan
Figure 3: Ground Floor Plan
Figure 4: View from the Pedestrian Galleria towards the Armory of the First Corps of Cadets on Stuart Street.
Figure 5: Model Photograph

B. **Proposed Dimensions and Uses**

The existing 75 Arlington Street building includes 195,200 square feet of office use, and 48,800 square feet of retail use on two floors. The Greyhound Bus Terminal is a one story structure which includes square footage dedicated to bus services as well as a Burger King. The proposed program and dimensions are provided on Table 1.1 on the next page.

Table 1.1
10 St. James Avenue
Program Dimensions & Uses

	Existing Building Renovation	New Building Construction	Total Development
Commercial Uses			
Office	219,600 SF*	493,300 SF*	713,000 SF*
Retail	16,900	20,200	37,000
Subtotal:	236,500	513,500	**750,000**
Public Use Spaces **			
Cultural Space	7,500	0	7,500
Daycare	0	4,000	4,000
Galleria	0	10,000	10,000
Subtotal:	7,500	14,000	**21,500**
Total:	**244,000**	**527,500**	**771,500**
Total Site Area			**75,013**
FAR *			
Commercial FAR			**10.00**
Public Use Space FAR			**.28**
Total:			**10.28**
Building Height Boston Zoning Code Definition (top of last occupiable floor)	130'	265'	
Height Including Mechanical Space	146'	285'	
Stories (above grade)	10	21	
Parking Facilities (below grade)	---	500 spaces	500 spaces

* Square footage of building and FAR based on Boston Zoning Code Definition of gross floor area.

** The location and exact square footage of public and cultural uses is under discussion with potential users.

III. ASSESSMENT OF DEVELOPMENT REVIEW COMPONENTS

Note anticipated direct and indirect environmental impacts if any, for each review component. If significant adverse impact is considered likely to result, please explain. Positive impact may also be noted.

A. Transportation Components

This section sumarizes the transportation assessment of the 10 St. James Avenue development. A more detailed technical report is included as an attachment to the PNF.

1. Traffic Management

Existing traffic volumes on the roadways adjacent to the site range from 7,100 daily vehicles (ADT) on Providence Street, to 9,300 daily vehicles on Stuart Street, to 13,500 daily vehicles on Berkeley Street to 14,000 daily vehicles on Arlington Street. These traffic volumes include the 1,820 daily vehicle trips generated by the existing activity at the 75 Arlington Street Building and the 1,460 daily vehicle trips that are generated by the Greyhound Bus Terminal.

The 10 St. James Avenue project will generate additional traffic at the site. The project will generate an incremental increase of 325 trips (in plus out) during the morning peak hour, 287 trips during the afternoon peak period and 1,225 total trips throughout the day. These estimates represent new trips or trips in addition to the traffic currently generated by the 75 Arlington Street Building and by the Greyhound Bus Terminal. Surrounding streets will experience additional daily traffic of about 1 to 2 percent of their current ADT. For purposes of a test at this early phase of the analysis, more detailed level of service analysis was conducted at the two major intersections with potential to be affected by this project. Level of service analyses performed for two key intersections adjacent to the development indicate that the project will not deteriorate traffic circulation relative to the no-build alternative.

2. Public Transportation Service

The MBTA provides service to the site primarily at the Back Bay (Orange Line and south side commuter rail system) and the Arlington Street Station (Green Line). Several private bus carriers also operate daily commuter services to the immediate area from communities located west and south of Boston.

Data from service and ridership counts performed for the MBTA and private bus carrier services in the project vicinity indicated that Green Line, Orange Line, commuter rail and commuter bus services demonstrate ample additional capacity for future public transportation needs of the 10 St. James Avenue project and other development in the Back Bay service area.

3. Parking Management

The existing Greyhound Terminal's lack of adequate off-street layover space for buses and on-street layover space for taxis and short-term public parking leads to considerable double parking and illegal on-street parking, which contributes to the traffic congestion on Stuart Street and St. James Avenue, especially during the afternoon peak period.

Relocation of the bus terminal will remove a considerable amount of poorly managed on and off-street bus and auto activity that contributes to poor vehicular and pedestrian circulation in the Park Square area. 10 St. James Avenue will consolidate all parking in an underground facility of 500 spaces. All building delivery and loading activities will be on-site and restricted to the Stuart Street side only and will be screened from view from the street. Subject to applicable regulations, needed short term public parking for shopping, van-pools, carpools and adequate handicapped parking will be provided. As a community benefit, the Developer is committed to provide area residents with overnight parking at discounted rates.

4. Construction Management

Before construction begins, the proponent will design a plan to manage vehicular and pedestrian traffic flow during the project's construction. The goal of the plan will be to minimize off-site impacts, provide direct truck routes that protect nearby residential areas and provide for safe pedestrian traffic. The plan will also include provisions for storage of construction materials, construction worker parking and police officer traffic control.

B. Environmental Protection Component

1. Wind

Since the proposed project will be higher than immediately adjacent buildings, some changes in local wind patterns would be anticipated. Wind studies for the 10 St. James Avenue project will be conducted for the Boston Redevelopment Authority as part of the design and environmental review process. If indicated, mitigating measures will be taken to lessen wind effects.

2. Shadow

Understanding the importance of minimizing shadow on the Common, the proponent has directed the design and environmental analysis team to undertake a computerized analysis of the theoretical building envelope within which a structure would avoid shadow impact on the Common. The proposed building's design fits within that envelope and will be the subject of continuing investigation, testing and public review as work on the Project Impact Report (PIR) and design review with the City proceed.

It is proposed that the shadow study parameters for the PIR focus on a procedure for setting building limits that protect the Common and minimize other potential shadow effects. These studies will identify objectives for shadow limitations and then test the design proposal against those parameters.

3. Daylight

The proposed project, which is higher than the existing buildings immediately adjacent to the site, will have some effect on the extent of daylight in the area; however, the orientation of the higher portion of the building and setbacks at the third and eighth floors along St. James Avenue will reduce the building's potential effect on area daylight.

4. Solar glare

Materials to be used in the construction of the 10 St. James Avenue project will be chosen to minimize the potential of solar glare.

5. Air quality

Motor vehicle traffic generated by the project will release small amounts of carbon monoxide (CO), nitrogen oxides (NOx) and volatile organic compounds (VOC) on nearby streets. These emissions will be offset by a reduction in bus trips to the site and the total elimination of a large number of diesel buses at idle which frequently layover on the site and which currently emit NOx, particulate matter (PM) and odorous diesel fumes.

The underground parking garage ventilation system will be designed to ensure compliance with EPA and Massachusetts DEP air quality standards, both inside the garage and outside near the exhaust vent. The ventilation stack will be located to minimize impacts on pedestrian areas and other fresh air intake structures.

Construction related dust will be a short-term impact and mitigation measures will be developed to ensure compliance with Massachusetts DEP Regulation 7.09.

Source: Tech Environmental, Inc.

6. Water quality

The project site is currently occupied by structures and paved area and drains into the city storm water system. Redevelopment of the property is not expected to result in increased stormwater runoff.

Based on previous studies, portions of the site had uses that may have resulted in groundwater contamination. Groundwater pumped from the site

during construction-related dewatering operations may need to be treated prior to discharge to meet state and federal limits for contaminates.

Source: Haley & Aldrich, Inc.

7. Flood hazard zones/wetlands

The proposed project is not located in a flood hazard zone or wetland.

8. Groundwater

Based on preliminary geotechnical study and subsequent environmental studies from 1986 to 1989 the depth to groundwater on the site ranges from 12 to 13 ft. below ground surface.

Construction of a four level below-grade parking garage will extend approximately 30 ft. below the existing groundwater level. The use of a concrete diaphragm wall (slurry wall) is being considered for the perimeter foundation wall. The slurry wall, when extended below the lowest level floor slab into the relatively impervious marine clay, will provide an effective cutoff of groundwater during construction. These measures will minimize the need for dewatering and reduce the potential for water table drawdown in the area.

Source: Haley & Aldrich, Inc.

9. Geotechnical impact, including subsoil conditions

Geotechnical considerations will include foundation construction procedures sensitive to surrounding structures, groundwater levels, and potential vibration.

According to available borings completed in 1986, the site is underlain by miscellaneous fill, soft organic soils, marine clay and glacial till soils. Bedrock was not encountered in the borings which were drilled to depths of up to 146 ft.

Geotechnical considerations will include foundation construction procedures that will mitigate impacts on surrounding streets, utilities and structures, potential vibration, and lowering of groundwater levels.

Source: Haley & Aldrich, Inc.

10. Solid and hazardous wastes

Solid waste

The proposed new building construction will generate a total of approximately 980 tons per year of solid waste. All solid waste will be handled through a contract collection and disposal service.

Source: Estimate based on DEP Master Plan for solid waste calculations for commercial uses.

Hazardous waste

According to previous environmental studies, portions of the property contain some evidence of contamination from previous releases of hydrocarbon/solvents (gasoline, turpentine) into the soil and groundwater. An underground diesel fuel storage tank used to fuel buses is located in the northeastern part of the Greyhound property. An underground gasoline storage tank was removed in August 1989 from the southern part of the site between the Greyhound Terminal and the 75 Arlington Street Building. Consequently it is possible that some contaminated soil will be encountered during excavation. Contaminated soil removed from the site will be handled by a specialty contractor in accordance with applicable laws and regulations. The possible need to treat groundwater pumped during excavation before discharge will be considered.

Prior to demolition, the Greyhound bus station will be inspected for asbestos. If any asbestos is present, it will be removed by a state-licensed contractor in compliance with Massachusetts DEP Regulation 310 CMR 7.15.

Source: Haley & Aldrich, Inc., Tech Environmental, Inc.

11. Noise

Project traffic will generate small amounts of noise on nearby streets. The HVAC system and loading docks will be constructed to comply with City of Boston and Massachusetts DEP regulations for noise generation. Construction activities will also temporarily generate noise and these will be managed to comply with City of Boston limits and Massachusetts DEP Regulation 7.10.

Source: Tech Environmental, Inc.

12. Construction impact, proposed safety features, and construction methodology

Construction activities will include demolition, excavation, foundation work, and construction of temporary and permanent building structures and support systems. A Construction Management Plan will be developed with the City to address logistics and safety features necessary to minimize disruption to the surrounding area.

13. Rodent control

A rodent control program will be implemented during construction of this project.

C. Urban Design Component

1. Architectural compatibility

Architectural features that characterize and establish the design quality of this district of the city include:

- large, commercial structures that fill whole blocks or large portions of blocks (e.g., Park Plaza Hotel, Park Square Building, 222 Berkeley, the 1945 John Hancock Building, and the existing 75 Arlington Street Building itself.)

- Emphasis on the lower 3-5 stories of a building for pedestrian level architectural detail, texture and material -- through facade articulation, massing to establish the prominence of the base of a building (as for many of the insurance company structures), and maintenance of a continuous streetwall.

- Use of masonry materials with emphasis on facade articulation for special features of the structures -- cornices, setbacks and building entrances where attractive lobbies and arcades invite the visitor to enter.

- Transitional height from the high towers of the Prudential and Hancock Buildings to the more moderate height of this project and adjoining new 20-story buildings.

The 10 St. James Avenue project with the new mid-block structure, pedestrian galleria, and the renovated 75 Arlington Street will be compatible with each of the foregoing features and contribute to the highest quality architectural character for this district.

2. Relationship to subdistrict urban design features

Design of the 10 St. James Avenue project recognizes the urban design features of a number of surrounding subdistricts and contributes positively in a variety of ways to each. Of importance are: the Park Square mixed-use district with its new life and vitality as an arrival point and attraction for visitors, residents, shoppers and office workers; the Insurance District of solid, older commercial structures; the Back Bay shopping district with its high pedestrian volumes and its architectural variety, rhythm, and attractive detail at pedestrian levels; the Armory of the First Corps of Cadets as an important landmark in the district; and the nearby, more residential subdistricts of Bay Village and the South End.

The proposed project will restore the 75 Arlington Street structure and will provide another active front door in Park Square. It will demolish the unattractive, deteriorated Greyhound Bus Terminal, replacing blight with a new commercial structure that fills out the block in a manner consistent with the surrounding office district. The emphasis on street level retail, cultural use and activity will link this area to the retail activities of the Back Bay and the Park Square District, as well as provide an attractive destination for the shoppers and workers who travel to this area by foot from residential areas to the south. The three story galleria will reinforce this link by opening onto an outstanding view of the historic Armory of the First Corps of Cadets thereby tying the two subdistricts together.

The 10 St. James team will continue to work with planners for and representatives of these subdistricts to be sure all efforts are made to assure a positive contribution to these areas.

3. Quality of pedestrian environment

A three-story through-block galleria connecting Stuart Street with St. James Avenue will transform an unsafe, inhospitable pedestrian route, which transverses the Greyhound Station today, into an inviting pedestrian route which serves as a link between the Back Bay, Bay Village, South End and Park Square districts. The site's existing six curb cuts for buses and automobiles will be reduced to two for automobiles only, thereby improving pedestrian safety and convenience.

The pedestrian experience along St. James Avenue, Arlington Street, and Stuart Street will be enhanced through building detailing at street level in the form of vertical bays and multiple shop windows facing directly on the street. The addition of a low, three-story base at mid-block along St. James Avenue will create a human-scaled environment in keeping with the character of the adjacent 75 Arlington Street Building, the Liberty Mutual Life Building, and the Armory of the First Corps of Cadets across Stuart Street from the project.

In addition, the three-story pedestrian galleria, with its glass domed ceiling and transparent entryways and exits, will offer views of the historic Armory to the south, and a connection to the low-scale shopping arcade in the Park Square building across St. James Avenue to the north. As such, the proposed project will have a front door at Bay Village and the South End as well as at the Back Bay.

Vehicular access and egress to the underground garage is currently planned for St. James Avenue and Stuart Street. Service vehicle access will be provided from Stuart Street. Special design attention will be focused on these facilities to assure that goals for quality pedestrian access and circulation are met. No parked trucks will be visible from the public streets.

4. Consistency with established design guidelines

The 10 St. James Avenue site falls within an area of the Interim Planning Overlay District which is currently the subject of BRA analyses for rezoning consistent with its moderate growth designation. Significant attention has been focused on the nearby districts of Back Bay and Midtown over the last two to three years. Community and City design objectives are reflected in these efforts. These guidelines establish moderate heights, seek to strengthen "streetwall" lines, and reinforce the use of traditional architectural features.

In developing the 10 St. James Avenue conceptual design, the proponent and team of architects and planners have discussed and reviewed preliminary conceptual design drawings with BRA staff and representatives of community organizations representing historic, open space, design, cultural and business interests in the area. The project team will continue to work with the BRA and related public agencies, neighborhood groups and other interested groups as the design process advances.

D. Historic Resources Component

1. Impact on objects, structures, buildings, sites, or districts of historic, architectural, archeological, or cultural distinction.

The proposed project site contains no structures listed in the National or State Registers of Historic Places. The project is one block south of the southern edge of the Back Bay Historic District, in close proximity to the South End Historic District, and two blocks south of the Boston Common and Public Garden, all of which are listed in the National Register of Historic Places. Individual National Register historic properties within the vicinity of the site, some of which have also been designated by the Boston Landmarks Commission, include the Armory of the First Corps of Cadets, the

Arlington Street Church, Trinity Church, Trinity Rectory, the First Baptist Church, and the Commonwealth Avenue Mall.

The design of the proposed project was developed with an awareness of these historic properties and districts, particularly with respect to views of the Armory of the First Corps of Cadets on Stuart Street, opportunities to re-establish a compatible use and traditional streetwall massing on the project site, and the elimination of shadow impact on the Boston Common. The project will use materials in keeping with surrounding buildings, and will present an articulated facade consistent in rhythm and texture with the character of older structures in the area.

Research as to the archeological potential of the site will be conducted as part of the environmental review for this project. Review of the results of this analysis will be coordinated with the City and State Archeologists.

Source: Massachusetts Historical Commission State Register of Historic Places, 1989; Phone Conversations with Boston Landmarks Commission Staff

2. Landmark status of property (Boston Landmark, State Register of Historic Places, National Register of Historic Places)

The existing buildings directly affected by this action are neither designated as Boston Landmarks nor listed on the National Register of Historic Places.

Source: Massachusetts Historical Commission State Register of Historic Places, 1989; Phone Conversations with Boston Landmarks Commission Staff

E. Infrastructure Systems Component

1. Anticipated sewage generation, if known.

In addition to sewage generated by 75 Arlington Street, the proposed new building construction will generate an estimated total of approximately 39,563 gallons of sewage per day.

Source: Based on the Sewage Flow Estimates table of the Massachusetts Environmental Code, Title 5, 310 CMR 15.00.

2. **Anticipated water consumption, if known.**

In addition to water consumption requirements of the 75 Arlington Street building, the proposed new building construction will require an estimated total of 45,497 gallons of water per day.

Source: Based on the Sewage Flow Estimates Table of the Massachusetts Environmental Code, Title 5, C10 CMR 15.00, plus 15 percent.

3. **Anticipated energy requirements, if known.**

While mechanical systems have not yet been designed for the project, the space heating and resulting energy demands are expected to fall within the normal range for a project of this size.

Arrangements with the electrical power utility, Boston Edison, will be made to ensure a supply of sufficient power.

The building will be designed to be energy efficient, will comply with all energy codes,and will incorporate energy efficient lighting and appliances.

IV. COORDINATION WITH OTHER GOVERNMENTAL AGENCIES

The project proponent will work with the agencies listed in Section I.F. above, and will also work closely with Boston Civic Design Commission; Executive Office of Environmental Affairs MEPA Unit; as well as the Massachusetts Historic Commission; Boston Transportation Department; and Boston Redevelopment Authority to ensure that the project's design is harmonious with the surrounding community and that impacts are sufficiently mitigated.

V. PROJECT'S CERTIFICATION

This form has been circulated to all agencies and persons as required by Boston Zoning Code, Article 31, Section 31-5 (1).

11/9/90	Anthony Pangaro	11/9/90	Karen B. Alschuler
Date	Signature of Proponent's Representative	Date	Signature of Person Preparing (if different)
	Anthony Pangaro, General Partner Name (Print or Type)		Karen B. Alschuler, Partner Name (Print or Type)
Address	RDC-10 St. James Avenue Realty Trust c/o Macomber Development Associates One Main Street Cambridge, Massachusetts 02141 Telephone: (617) 494-4900		Skidmore, Owings & Merrill 220 East 42nd Street New York, NY 10017 Telephone: (617) 247-1070 (212) 309-9500

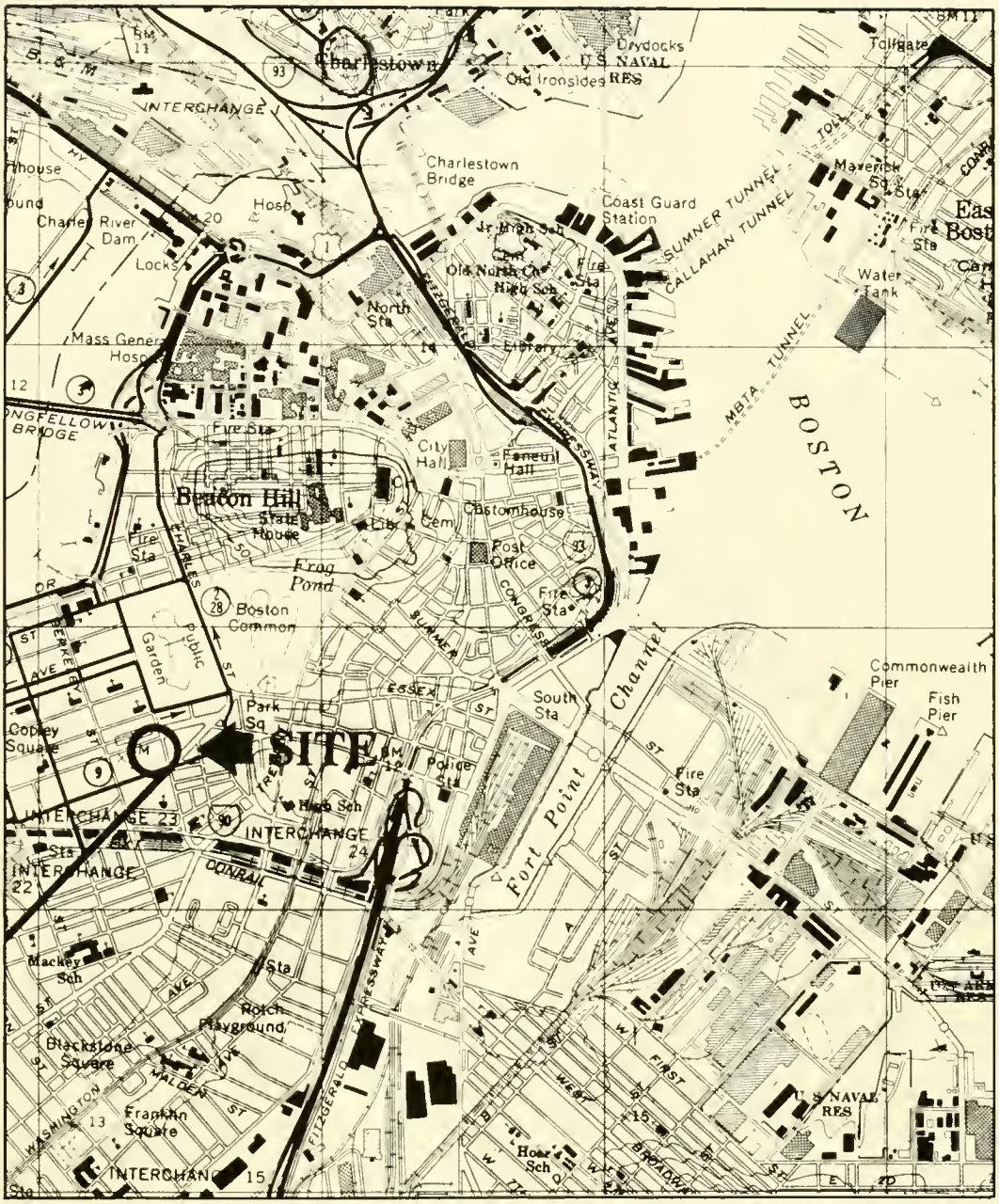

Figure 1: USGS Site Location Map
10 St. James Avenue

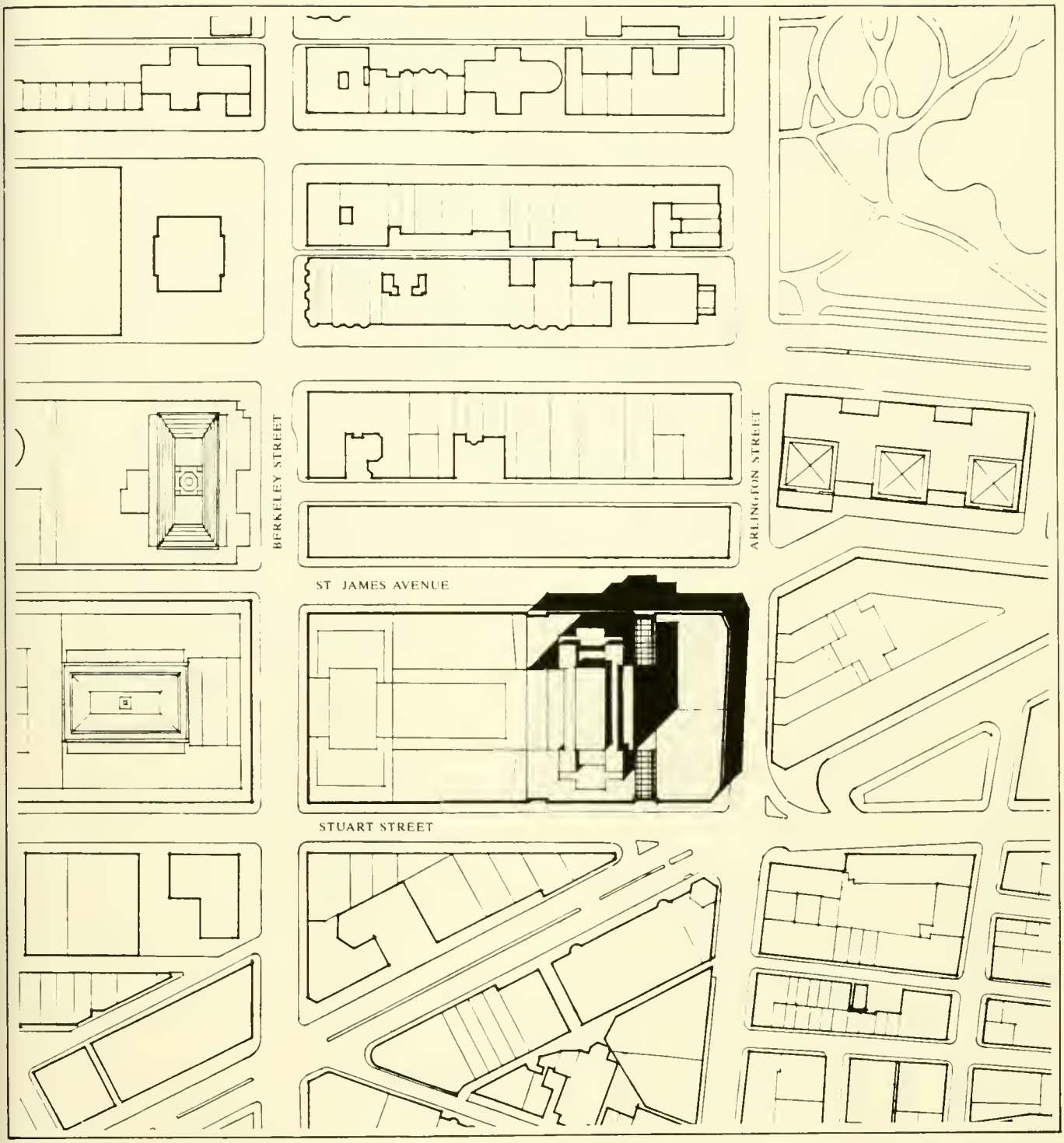

Figure 2: Roof Plan
10 St. James Avenue

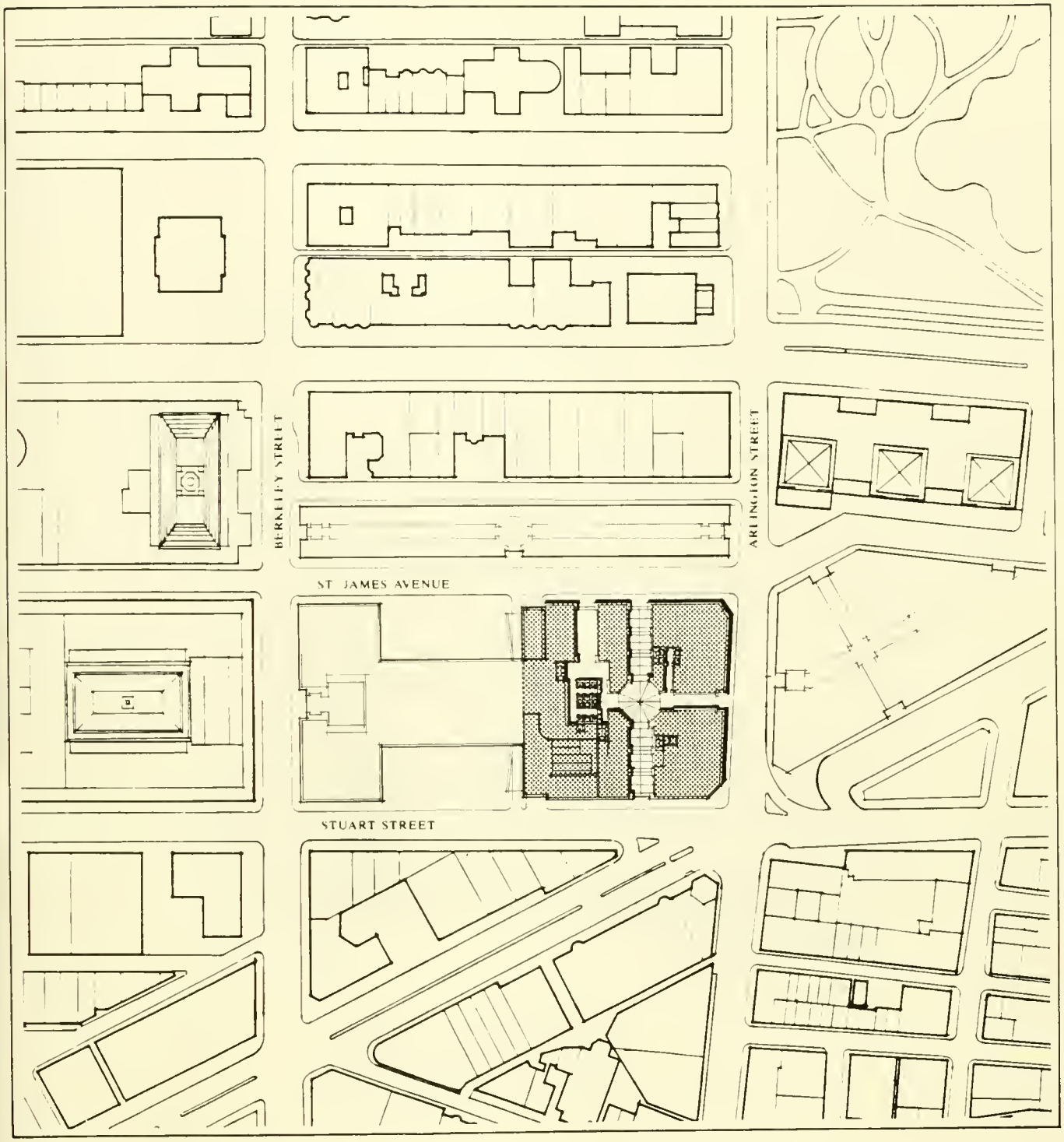

Figure 3: Ground Floor Plan
10 St. James Avenue

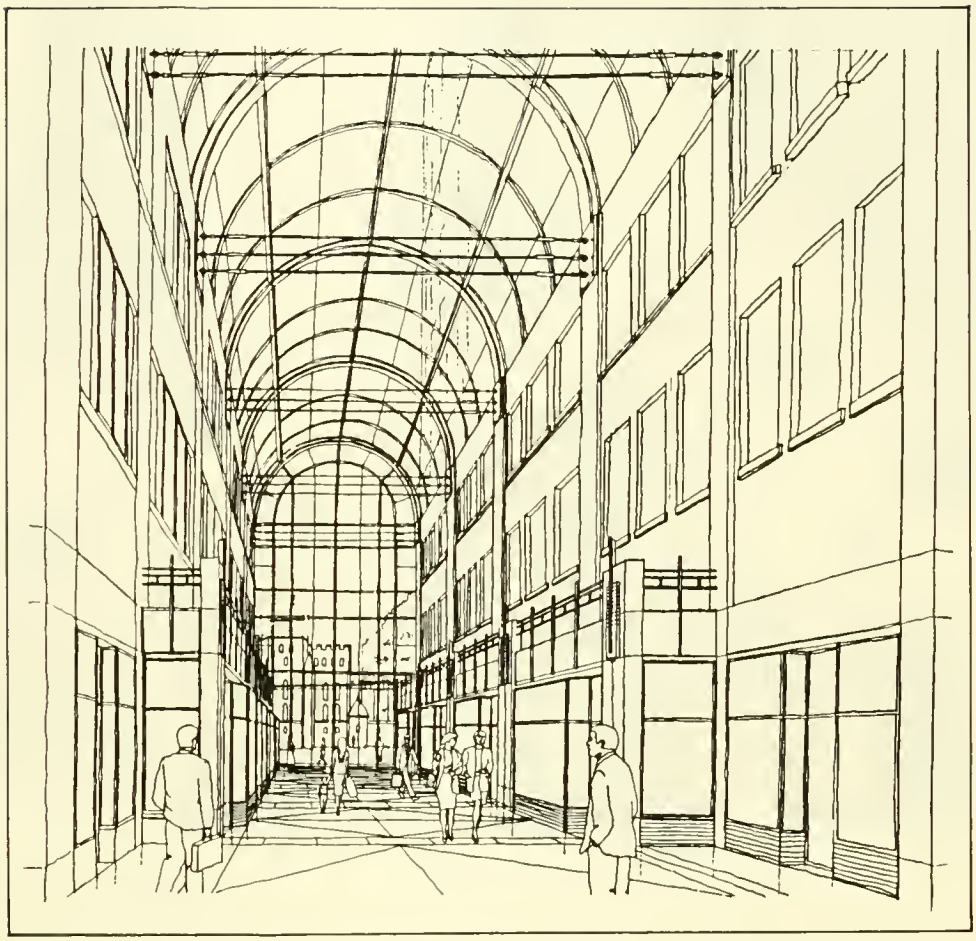

Figure 4: View from Pedestrian Galleria
Towards the Armory of the First
Corps of Cadets on Stuart Street
10 St. James Avenue

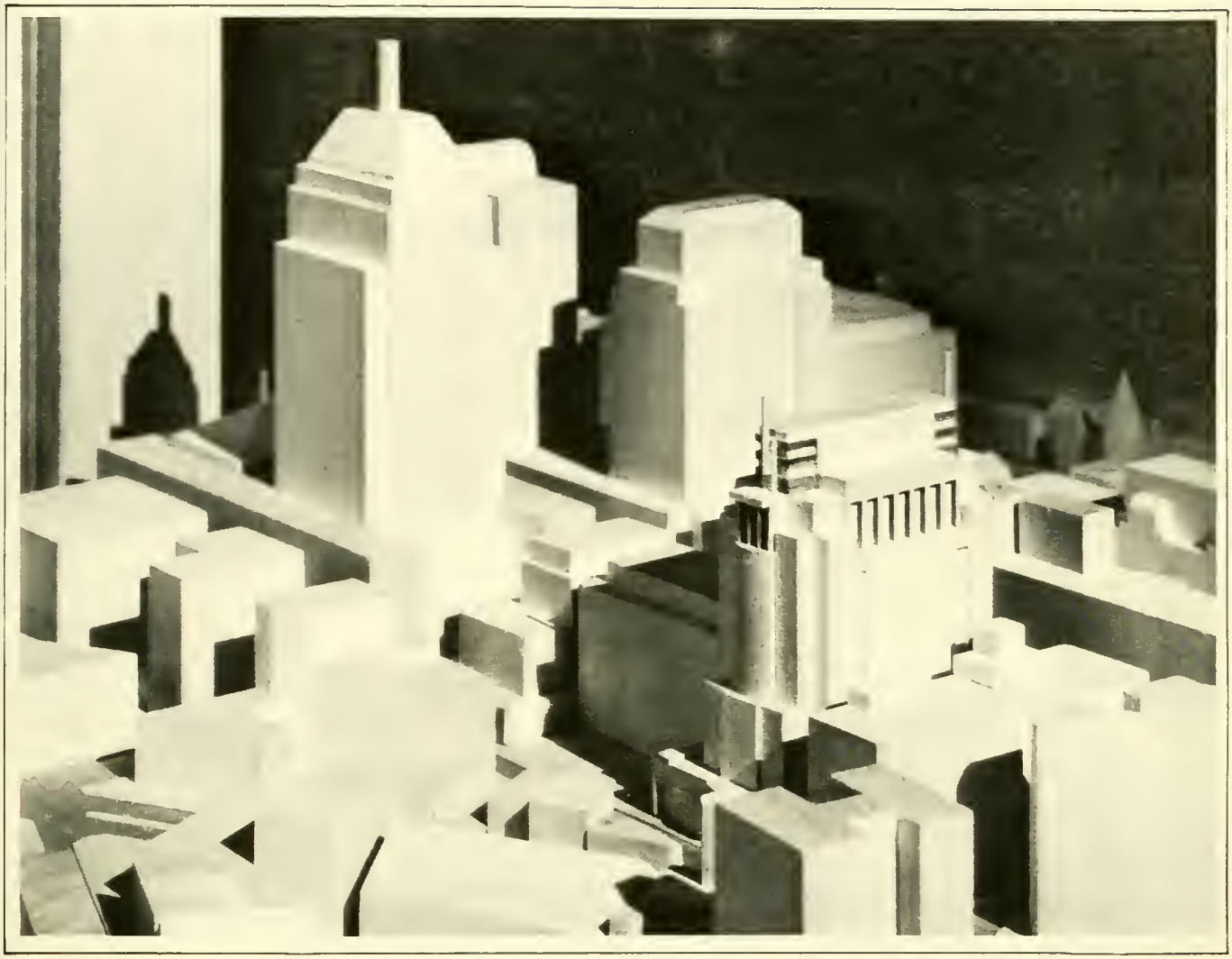

Figure 5: Model Photograph
10 St. James Avenue

10 ST. JAMES AVENUE PROJECT

BOSTON, MASSACHUSETTS

Transportation Assessment

Attachment I

Submitted to:

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By:

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November, 1990

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Tables:

1.0 INTRODUCTION

This technical report provides a transportation assessment for the proposed 10 St. James Avenue development. 10 St. James Avenue will be a mixed-use project which will tie a restored Paine Furniture Building (75 Arlington Street) on Arlington Street to a proposed adjacent office and retail building fronting St. James Avenue and Stuart Street on the site which is currently occupied by the Greyhound Bus Terminal.

Restoration of 75 Arlington Street will offer 219,600 gross square feet of office space and 16,900 gross square feet of retail space. The proposed new building will provide 493,300 gross square feet of office space and 20,200 gross square feet of retail space. A 4,000 square foot daycare center, 7,500 square feet of cultural space and 10,000 square feet of galleria will also be included in the project. The project also includes a proposed below ground parking facility with approximately 500 spaces.

The report includes the following sections:

- Traffic Management
- Parking Management
- Mitigation

This transportation assessment of the proposed 10 St. James Avenue project incorporates information available from the Boston Transportation Department's recently completed Transportation Strategies project for the Back Bay. This comprehensive study assessed the traffic, parking, transit, special events and pedestrian needs and issues of the Back Bay, and produced an extensive amount of data and information. A key objective of the BTD in the Back Bay project was to develop uniform data inventories and baselines for use in subsequent planning and development projects. This would ensure that traffic assessments would consistently use similar data, and facilitate the identification of traffic impacts and mitigation measures by the BTD.

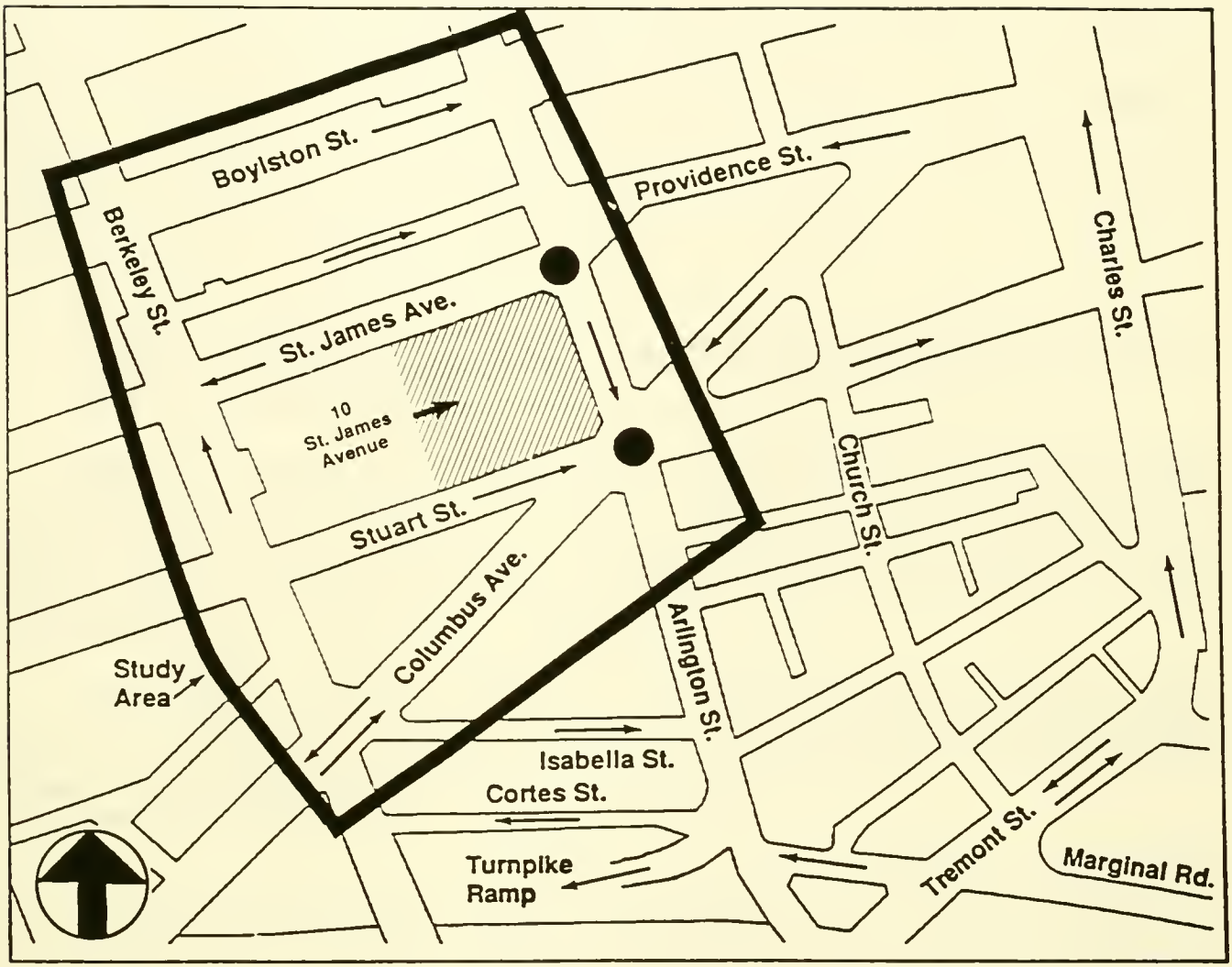
2.0 TRAFFIC MANAGEMENT

2.1 Current Traffic

The major roadways within the vicinity of the site include Arlington Street, Berkeley Street, St. James Avenue and Stuart Street (See Study Area map). Each of these roadways functions as an arterial within the commercial area of the Back Bay, connecting the area to downtown Boston and to several key primary highways, including Storrow Drive, the Southeast Expressway, and the Massachusetts Turnpike.

Existing traffic volumes on the roadways adjacent to the site are shown on Table 1. These traffic volumes range from 7,100 daily vehicles (ADT) on Providence Street to 9,300 daily vehicles on Stuart Street, to 13,500 daily vehicles on Berkeley Street to 14,000 daily vehicles on Arlington Street. These traffic counts were taken in 1989 by Cambridge Systematics as part of an extensive traffic count program for the Back Bay study and were based on manual peak period counts and 24 hour automatic traffic register counts.

10 St. James Avenue Study Area



Legend:

- Intersections Analyzed for the ENF/PNF
- Direction of Traffic

Table 1

Current Traffic Volumes*

Roadway**	AM Peak Hour	PM Peak Hour	Daily
Arlington St. (south of Boylston)	990	1,110	14,000
Berkeley St. (south of Boylston)	940	1,070	13,500
Providence St. (east of Arlington)	420	570	7,100
Stuart St. (east of Berkeley)	740	600	9,300

* Based on counts taken in 1989 by Cambridge Systematics for the Back Bay study.

** These count locations were selected based on the primary routes to and from the 10 St. James Avenue project and recognizing the one-way system of roadways in the area.

These traffic volumes include the estimated 1,820 daily vehicle trips generated by the existing activity at 75 Arlington Street and the 1,460 daily vehicle trips that are generated by the Greyhound Bus Terminal. Daily traffic estimates for 75 Arlington Street are based on standard trip generation rates based upon the current allocation of office and retail uses. Daily traffic activity at the bus terminal was estimated based on an on-site morning and afternoon peak period survey of bus and non-bus vehicle movements. The survey was performed for the 10 St. James Avenue project in November, 1989.

Bus facility access is currently provided by two north-south driveways connecting St. James Avenue and Stuart Street. During peak hours, the bus terminal is particularly active with 50 to 60 buses entering and exiting the facility. This volume of bus activity, in conjunction with buses and terminal related autos and taxis that park (and double park) on adjacent streets, reduces area mobility and circulation, particularly on Arlington Street south of Boylston Street and on Stuart Street.

Level of service (LOS) analyses were undertaken for the St. James/Arlington intersection and the Stuart/Columbus/Arlington intersection. These two intersections were assessed because they are adjacent to the development, and they were identified in the City's Back Bay study as signalized intersections that do not operate well for vehicular or pedestrian traffic. The LOS analysis showed that the St. James/Arlington intersection currently operates at level of service B and that the Stuart/Columbus/Arlington intersection currently operates at level of service D during the AM and PM peak hours.

The MBTA provides service to the site primarily with the Back Bay station (Orange Line and south side commuter rail system) and the Arlington Street station (Green Line). Several private bus carriers also operate daily commuter services to the immediate area from communities located west and south of Boston. Service and ridership counts were performed for each of these MBTA and private bus carrier services as part of the BTD's Back Bay project and the MBTA's Old Colony project. The data indicate that these services provide ample additional capacity for future transit needs of the 10 St. James Avenue project and other development in downtown Boston and the Back Bay. For example, the current peak hour ridership to capacity ratios of the Orange Line are 51 percent for the northbound direction and 79 percent for the

southbound direction. The Green Line has a ridership to service capacity ratio of 72 percent. Recent studies have concluded that each line has ample operating capacity to handle the additional transit ridership forecasted for the Back Bay and including 10 St. James Avenue.

2.2 Future Traffic

The 10 St. James Avenue project will generate additional traffic at the site. The project will generate an incremental increase of 325 trips (in plus out) during the morning peak hour, 287 trips during the afternoon peak period and 1,225 total trips for throughout the day (see Table 2). These estimates reflect expected changes in the mix of uses (proposed office, retail and cultural use programs) in the 75 Arlington Street Building as well as the anticipated traffic to the new building, and therefore represent new trips or trips in addition to the traffic currently generated by the 75 Arlington Street Building and by the Greyhound Bus Terminal.

Using Boston access plan guidelines, the trips generated by 10 St. James Avenue are distributed on the surrounding roadways, and the results are shown on Table 2. The assignment assumes that the proposed development will include garage access and egress from both Stuart Street and St. James Avenue.

Table 2

Overall Daily Project Traffic Impacts*

Roadway	Existing**	Increase	Total	Percent
	Inbound Trips			
Arlington St. (south of Boylston)	14,000	196	14,196	1.4
Berkeley St. (south of Stuart)	13,500	178	13,678	1.3
Providence St. (east of Arlington)	7,100	55	7,155	0.8
Stuart St. (east of Berkeley)	9,300	184	9,484	2.0
	Outbound Trips			
Arlington St. (south of Stuart)	14,000	177	14,177	1.3
Berkeley St. (north of St. James)	13,500	135	13,635	1.0
St. James Ave. (west of Berkeley)	7,100	245	7,345	3.5
Stuart St. (east of Arlington)	9,300	55	9,355	0.6
Total New Trips		1,255		

* These traffic count locations were selected based on the primary routes to and from the 10 St. James Avenue project and recognizing the one-way system of roadways in the area.

** Based on 1989 counts by Cambridge Systematics for the Back Bay study.

The roadways surrounding 10 St. James Avenue are expected to easily accommodate a modest amount of additional daily traffic. Arlington Street will experience a 1.4 percent growth in daily traffic south of Boylston Street (vehicles accessing the site) and a 1.3 percent growth south of Stuart Street (vehicles leaving the site). Berkeley Street will experience a 1.3 percent growth in daily traffic south of Stuart Street (vehicles accessing the site) and a 1.0 percent growth north of St. James Avenue (vehicles leaving the site). Traffic on Providence Street will experience a 0.8 percent growth in daily traffic east of Arlington Street (vehicles accessing the site) and a 3.5 percent growth west of Berkeley Street (vehicles leaving the site). Traffic on Stuart Street will experience a 2.0 percent growth in daily traffic east of Berkeley Street (vehicles accessing the site) and a 0.6 percent growth east of Arlington Street (vehicles leaving the site).

The number of project generated trips assigned to a particular roadway section is relatively low primarily because the roadways are one-way, and therefore handle only the inbound or outbound trips generated by the project on any particular segment of the roadway.

Intersection level of service analyses where performed at the Stuart/Columbus/Arlington intersection and the St.James/Arlington intersection for several conditions, including existing traffic (1989), the No-Build option (1994) and the Build option (1994). These two intersections were analyzed because of prior work undertaken for the Back Bay study. The study identified the Stuart/Columbus/Arlington intersection as a location that operates very poorly for both vehicular and pedestrian traffic. The St. James/Arlington intersection was included in the 10 St. James Avenue project analysis because the current plans to improve the Stuart/Columbus/Arlington intersection by the Boston Transportation Department would improve that intersection partly by routing traffic that is currently on Columbus Avenue westbound to Providence Street and to the Arlington/St. James intersection. The results of this analysis is summarized on Table 3.

Table 3
Intersection Level of Service*

Option		Stuart/Columbus/Arlington		St. James/Arlington	
		AM	PM	AM	PM
1.	Existing (1989)	D	D	B	B
2.	No-Build (1994)	E	D	B	B
3.	Build (1994)	E	D	B	B
4.	No-Build with BTD Improvements**	C	C	B	C
5.	Build with BTD Improvements**	C	C	B	C

* Based on the 1985 Highway Capacity Manual, Chapter 9
** Reconstruction with new circulation at Stuart/Columbus/Arlington

The Stuart/Columbus/Arlington intersection level of service (LOS) would be unaffected by the project, with it experiencing level of service E (capacity) during the AM peak hour and level of service D during the PM peak hour under either the no-build or build option. If the intersection is reconstructed as it is currently programmed as part of the Park Square project by the BRA and BTD, the level of service would be improved considerably to LOS C for both the no-build and build options.

The St. James Avenue/Arlington Street intersection experiences level of service B under the no-build and build options. The level of service would remain unchanged because the additional project traffic which will use Arlington Street is small, and Arlington Street has four travel lanes to distribute the traffic. Level of service C would occur during the PM peak hour for both the no-build and build options if the planned circulation changes to the Stuart/Columbus/Arlington intersection are implemented by the BRA and BTD. This is because the redesign of the Stuart/Columbus/Arlington intersection would divert traffic from Columbus Avenue westbound to Providence Street and the St. James Avenue/Arlington Street intersection.

The assignment of trips to area streets that was performed for the level of service analysis clearly indicates that the one-way system of roadways in the 10 St. James Avenue project area helps to reduce or disperse the number of trips that would use any particular street or corridor to access the project. Previous studies, such as the Back Bay project and Prudential Redevelopment project, indicated that most intersections in the surrounding area currently operate at level of service C or better. Therefore it is unlikely that the 10 St. James Avenue project would significantly impact other intersections in the area.

Relocation of the bus terminal will remove a considerable amount of poorly managed on and off-street bus and auto activity that contributes to congestion and poor circulation in the Park Square area. In addition, planned traffic improvements of the area by the BRA and BTD, including the reconstruction of area intersections, the redesign of traffic control signals and the implementation of a Trip Reduction Program (TRP) for Stuart Street, will more than off-set the additional traffic generated by 10 St. James Avenue.

3.0 PARKING MANAGEMENT

3.1 Current Parking

An on-street parking survey was undertaken for St. James Avenue and Stuart Street between Arlington and Berkeley Streets (See Table 4). Demand for meter (1-hour limit) spaces remains high throughout the day, with autos filling spaces as quickly as they become available. Violation rates (vehicles parked longer than the time limit at the meters) average about 40 to 45 percent, which significantly reduce the opportunities for short-term on-street parking.

The Greyhound Terminal's lack of adequate off-street layover space for buses and on-street layover space for taxis and short-term public parking leads to considerable double parking and illegal on-street

TABLE 4

ON-STREET PARKING SURVEY

ST. JAMES AVENUE AND STUART STREET[1]

	# of 1-Hour Meter Spaces	# of Other Designated Spaces	Vehicles Parked 7 AM-7 PM		Violations[6]		Percent of Vehicles Parked at Meters for:			
			Meters	Other	Meters	Other	1 Hour or Less	1-2 Hours	2-3 Hours	Over 3 Hours
St. James Avenue[2]										
Northside	17	2[3]	105	8	32	3	62%	23%	2%	13%
Southside	6	5[4]	37	10[5]	10	4[5]	60%	19%	5%	16%
Stuart Street[3]										
Northside	12	0	60	0	21	0	57%	24%	5%	14%
Southside	11	0	55	0	15	0	60%	20%	7%	13%

NOTES:

1. Based on February 21, 1990 survey, 7 AM to 7 PM.
2. Arlington to Berkeley Streets.
3. One loading zone and one bus stop space.
4. Three handicapped, one loading zone and one cab stand spaces.
5. Excludes cab stand.
6. Number of vehicles parked longer than time limit at meters, and number of non-qualified users at other spaces.

parking, and is a cause of reduced mobility and congestion on Stuart Street and St. James Avenue, especially during the PM peak period. Several buses usually park haphazardly on-site or on surrounding roadways. Taxis typically queue at the taxi stand on St. James Avenue for long periods of time. Autos waiting for bus passengers to arrive also dwell on St. James Avenue, frequently double parking across from the terminal.

3.2 Future Parking

Currently, there are no designated parking spaces on the site with the exception of at-grade bus berthing bays at the Greyhound Terminal. For the proposed development, all parking will be provided in an underground garage of 500 spaces on four levels.

Access and egress for the garage is proposed on both Stuart Street and St. James Avenue, with off-street building delivery and loading activities restricted to the Stuart Street side only.

As a community benefit, the developer is committed to providing residents with overnight parking at discounted rates. It is also proposed that short- term parking for daytime shopping will be provided and alleviate the demand for on-street parking. Adequate handicapped parking as well as vanpool/carpool parking will also be provided.

10 St. James Avenue will provide superior parking management to the site compared to current bus terminal conditions. This will also facilitate area traffic circulation, improve aesthetics through the removal of on-street bus parking near residential neighborhoods, and eliminate the nuisance of diesel bus fumes.

4.0 MITIGATION

To minimize and reduce potential impacts of the 10 St. James Avenue project, a transportation management plan will be developed in accordance with the City's Transportation Access Plan requirements and the proposed Transportation Plan recently developed by the City as part of the Transportation Strategies for the Back Bay project. It is understood that the specific mitigation commitments made under the Access Plan will become a legally binding Transportation Access Plan (TAP) agreement between the developer and the City.

The following sections provide a brief discussion of the type of mitigation measures that are likely for implementation.

4.1 Travel Demand Management

Reducing the amount of traffic generated by the proposed project and particularly the amount of drive alone commuting is a key objective of demand management. Recent data for the Back Bay indicate that active travel demand management programs are effective trip reduction mechanisms by reducing drive alone commuting. The following measures are identified for potential inclusion in the Access Plan.

- Designate a transportation coordinator who would work with the City to identify programs to meet the proposed commuter standards highlighted in the Transportation Plan.

- The transportation coordinator would also work with the proposed Back Bay TMA to promote public transportation, ridesharing and vanpooling alternatives on-site and work cooperatively with other project teams and community groups to improve traffic conditions on an areawide basis.

- Parking incentives favoring vanpools including designated spaces would also be provided in the 10 St. James Avenue garage.

4.2 Parking Improvements

All parking will be provided in an underground facility of 500 spaces. As a community benefit, the Developer is committed to provide area residents with overnight parking at discounted rates. In addition, short term public parking for shopping, adequate handicapped parking and vanpool parking will also be provided.

4.3 Loading Improvements

The project will be designed to accommodate all loading activities in off-street loading docks on Stuart Street.

4.4 Construction Management

Before construction begins, the Developer will design a plan to manage vehicular and pedestrian traffic flow during the project's construction. The goal of the plan will be to minimize off-site impacts, provide direct truck routes that protect nearby residential areas and provide for safe pedestrian traffic. The plan will also include provisions for storage of construction materials, construction worker parking and police officer traffic control.